Diagnostic Pathology

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Oral presentation

Synovial sarcoma of the left tonsil in a 31-year-old patient: report of a rare case

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Aims

Synovial sarcoma (SS) is a mesenchymal spindle cell tumor with variable epithelial differentiation and a specific chromosomal translocation t(X;18)(p11;q11). Despite the name, SS is unrelated to synovium and may occur at any site of the body, mostly in the deep soft tissue of extremities. Around 5% arise in the head and neck region. Although the WHO textbook already describes the tonsils as an unusual site for the occurrence of SS, only two case reports could be found in the literature. Because of this rarity, we dare to present the following case.

Case report

A hitherto healthy 31-year-old male Turkish patient was admitted to hospital due to a left-sided sore throat accompanied by increasing dysphagia, which developed within 3–4 months. Preoperative computer tomography disclosed a 4.2 × 2.6 × 2.3 cm encapsulated tumor in the left tonsillar region expanding to the hypopharynx and the epiglottis.

Methods

Intraoperatively performed quick frozen sections detected an encapsulated malignant "small, round and blue" tumor, which was removed completely. Histologically, a malignant undifferentiated spindle-cell shaped component prevailed that stained immunohistochemically for CD99, bcl2, CD10 and calponin. At multiple sites, an additional pancytokeratin (AE1/AE3)- and EMA-positive epithelial differentiation of the tumor was detected, partly with glandular differentiation. Nuclear ki-67 expression was present in about 50% of the spindle cells and in about 15% of the epithelial compartment. The presence of the SYT(SS18) rearrangement indicative for the t(X;18) translocation and characteristic for synovial sarcoma was demonstrated by fluorescence in situ hybridization.

Results

Based on the histological, immunohistological and molecular pathological findings, the tumor was classified as biphasic SS with poorly differentiated areas, qualifying for grade III.

Conclusion

The diagnosis of SS should be kept in mind even in such unusual sites as the tonsils.